

WHAT IS CLAIMED IS:

1. A highly water-absorptive ophthalmic lens which is formed of a macromolecular material including vinyl alcohol unit as a major component, wherein the improvement comprises:

the macromolecular material being formed by saponifying a copolymer obtained by copolymerization of a polymerizable monomer composition which consists of vinyl acetate and diethylene glycol divinyl ether;

the ophthalmic lens having a water content in a range from 73% to 84%; and

the ophthalmic lens having a ratio of a dimensional change of less than ± 2 % and being free from whitening after (A) the ophthalmic lens has been subjected to three cycles of a freezing-thawing operation wherein the ophthalmic lens formed of the macromolecular material is left at a temperature of not higher than -10°C for not less than twelve hours, and is subsequently left at a temperature in a range from 15°C to 30°C for not less than six hours, and/or (B) the ophthalmic lens has been kept at a temperature in a range from 1°C to 9°C for three months.

2. A highly water-absorptive ophthalmic lens according to claim 1, wherein the polymerizable monomer composition consists of 92 to 98.5 wt.% of the vinyl acetate and 1.5 to 8 wt.% of the diethylene glycol divinyl ether.

3. A highly water-absorptive ophthalmic lens according to claim 1, wherein the macromolecular material is nonionic.

4. A highly water-absorptive ophthalmic lens according to claim 1, wherein the diethylene glycol divinyl ether is a crosslinking monomer for forming crosslinkages in the macromolecular material.

5. A highly water-absorptive ophthalmic lens according to claim 1, wherein the copolymer is saponified at a temperature in a range from 0°C to 70°C.

6. A method of producing a highly water-absorptive ophthalmic lens according to claim 1, comprising the steps of:

preparing a polymerizable monomer composition which consists of vinyl acetate and diethylene glycol divinyl ether;

introducing the polymerizable monomer composition into a mold cavity of a mold assembly which is shaped to produce a configuration of an intended ophthalmic lens;

copolymerizing the polymerizable monomer composition by photo-polymerization to obtain a copolymer; and

saponifying the obtained copolymer.

7. A method according to claim 6, wherein the

mold assembly consists of a male mold and a female mold at least one of which is formed of a light-transmitting material.

8. A method according to claim 6, wherein at least one sensitizer is added to the polymerizable monomer composition.

9. A method according to claim 8, wherein the at least one sensitizer is added to the polymerizable monomer composition in an amount of 0.001 to 5 parts by weight per 100 parts by weight of the polymerizable monomer composition.